

Abstract of the Disclosure

A self-relieving choke starting system for a carburetor of a combustion engine has an elongated cammed latch which projects radially outward from a rotating shaft of a choke valve located in an upstream region of a fuel-and-air mixing passage carried by a body of the carburetor. During a first attempt at starting a cold engine, the user manually rotates the choke valve from a spring biased open to a full choke position whereupon a cam end of the latch contacts a follower arm, which projects radially outward from a rotating shaft of a throttle valve located downstream of a venturi of the mixing passage. As the choke valve manually rotates closed, the throttle valve automatically rotates in an open direction against the biasing force of a throttle spring from a slow idle state, for normal engine operation, to a fast idle state for engine starting. Once the choke valve is in the full choke position and the throttle valve is in the fast idle position, a rich mixture of fuel-and-air will flow into the combustion chamber of the engine during the first attempt at starting the cold engine. If the first attempt should fail, the user can manually rotate the choke valve in an open direction to a half-choke position while the throttle valve is automatically maintained in the fast idle position to provide a slightly leaner mixture of the fuel-and-air to the engine for following attempts at cold starting.